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Before the  
**FEDERAL COMMUNICATIONS COMMISSION**  
Washington, D.C. 20554

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OCT 30 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )  
 )  
1998 Biennial Regulatory Review -- )  
Modifications to Signal Power )  
Limitations Contained in Part 68 )  
of the Commission's Rules )

CC Docket No. 98-163

**MOTION TO ACCEPT LATE-FILED COMMENTS**

GTE Service Corporation and its affiliated domestic telephone operating companies ("GTE"), pursuant to Sections 1.4 and 1.41 of the Commission's Rules, hereby moves the Commission to accept one day late the attached document entitled "Comments of GTE." GTE experienced technical difficulties in the transmission of the pleading from its Irving, Texas office to the Washington, D.C. office.

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No harm is done to any party inasmuch as the filing is late by just one business day.

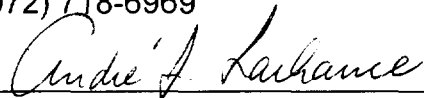
Dated: October 30, 1998

Respectfully submitted,

GTE Service Corporation and its  
affiliated domestic telephone operating  
companies

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**COMMENTS OF GTE**

GTE Service Corporation and its affiliated domestic telephone operating companies (collectively "GTE")<sup>1</sup> respectfully submit these comments in response to the Notice of Proposed Rulemaking in the above-captioned proceeding.<sup>2</sup> In the *Notice*, the Federal Communications Commission ("FCC" or "Commission") seeks comment on whether customers will be able to download data from the Internet more quickly if it relaxes the current signal power limitations contained in section 68.308 of its rules. The

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<sup>1</sup> GTE's domestic telephone operating companies are: GTE Alaska Incorporated, GTE Arkansas Incorporated, GTE California Incorporated, GTE Florida Incorporated, GTE Hawaiian Telephone Company Incorporated, The Micronesian Telecommunications Corporation, GTE Midwest Incorporated, GTE North Incorporated, GTE Northwest Incorporated, GTE South Incorporated, GTE Southwest Incorporated, Contel of Minnesota, Inc., and Contel of the South, Inc.

<sup>2</sup> 1998 Biennial Regulatory Review -- Modifications to Signal Power Limitations Contained in Part 68 of the Commission's Rules, *Notice of Proposed Rulemaking*, (CC Docket No. 98-163), FCC 98-221 (released September 16, 1998) (hereinafter "*Notice*").

Commission proposes to increase the power limit on encoded analog content specified in sections 68.308(h)(1)(iv) and 68.308(h)(2)(v) from -12dBm to -6 dBm.<sup>3</sup>

As set forth herein, GTE believes that the Commission cannot alter its rules absent conclusive and verifiable evidence that the "potential harmful effects of a signal power transmit level in excess of -12dBm" have been addressed in controlled tests that measure the actual degradation in the embedded network. Specifically, GTE urges the Commission to hold in abeyance any action in this proceeding until the Alliance for Telecommunications Industry Solution's ("ATIS") T1A1.7 Working Group completes its "A Technical Report on A Test Plan for Investigating the Crosstalk Potential of Modems Conforming to ITU-T Recommendation V.90" ("Technical Report") and companies have sufficient time to complete meaningful testing using the plan.

## **I. DISCUSSION**

### **A. GTE has a vested interest in improving access to the Internet as well as maintaining the quality of its existing telecommunications network.**

GTE is a world leader in the provision of Internet services and related network services. GTE has invested considerable resources developing technology that is advancing the Internet's ability to increase productivity for both companies and individuals. In addition, GTE has spent hundreds of millions of dollars improving its telecommunications network to accommodate the increased traffic that is generated by Internet usage. Judged by any standard, GTE's commitment to the Internet and other forms of data communication is unquestionable. It is in light of GTE's broad

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<sup>3</sup> This change will effectively allow PCM modems to quadruple their signal power and double their output voltage.

involvement in all aspects of Internet services that GTE submits the following comments.

The ability to increase data transmission rates benefits GTE in several ways. First, higher rates improve GTE's Internet service offerings. Clearly, the ability to increase data transmission rates improves the efficiency of Internet providers and benefits Internet users. Secondly, higher transmission rates should potentially shorten the network holding times generated by Internet customers. GTE has had to place an enormous amount of additional capacity into its network to continue to maintain acceptable service quality levels in the face of the increased network usage. Higher transmission rates may in a small way assist in controlling the unscheduled capacity additions that LECs are currently facing. Yet, balanced against the desire to increase data transmission rates, is GTE's obligation (both by regulatory requirement and by sound business judgment) to continue to maintain its telecommunications network in a manner that meets all accepted standards. Higher transmission rates cannot come at the expense of overall network degradation. The Public Switched Telephone Network is far too important a resource to be subject to cavalier rule changes. Only after careful analysis of actual network testing can the Commission make a public interest determination in this matter. The record currently does not contain the critical information needed to make this assessment.

**B. GTE urges the Commission to establish a complete record in this proceeding based on actual test data prior to making any changes to the Part 68 rules**

It is out of concern for possible network degradation that GTE urges the Commission to withhold any changes to Part 68 until the record contains conclusive and verifiable evidence that the change will not harm the vast majority of users that depend

on the PSTN for their telecommunications needs. As the Commission acknowledges in the *Notice* at footnote 22, there are a number of "potential harmful effects of a signal power transmit level in excess of -12dBm." Until all concerns regarding these harmful effects have been addressed in controlled tests -- tests that measure the actual degradation in the embedded network -- the assumption that an ever increasing number of modems with -6dBm signal power will not cause network harm is not justified.

GTE urges the Commission to hold in abeyance any action in the instant proceeding until the Alliance for Telecommunications Industry Solution's ("ATIS") T1A1.7 Working Group completes its "A Technical Report on A Test Plan for Investigating the Crosstalk Potential of Modems Conforming to ITU-T Recommendation V.90" ("Technical Report") and companies have sufficient time to complete meaningful testing using the plan. The Letter Ballot Process recently closed.<sup>4</sup> The Technical Report contains a test plan which can be used to investigate the potential for crosstalk induced into adjacent voiceband service subscriber loops by V.90 Modems operating with a -6dBm signal power limit for downstream transmissions. The empirical evidence gained through this effort will be extremely helpful in determining the magnitude of the risk that increasing the signal limit for PCM modems poses to the network. GTE is

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<sup>4</sup> The Letter Ballot Process closed on October 27, 1998.

confident that the industry can complete tests and provide a proper record in this matter within six months.<sup>5</sup>

**C. In the event that the signal power limit is increased for PCM modems, the Commission must still insist on reasonable safeguards that balance modem performance and network harm.**

While the Notice indicates that the rule change is intended for PCM modems "used by Internet Service Providers and other online information service providers to transmit data to customers," GTE urges the Commission to limit any increase in signal power to specific PCM modems that have undergone careful examination (*i.e.*, V.90 modems). Assuming the Commission, after careful analysis finds that V.90 modems can operate with a -6dBm signal power, under no circumstance should the rules indiscriminately allow all terminal equipment to operate using that power level.

As the T1A1.7 Work Group's Technical Report specifies, V.90 modems should drop back to -12dBm signal power levels when lower transmission rates are established.<sup>6</sup> Only modems that have been tested and shown to not cause network harm should be allowed to use a signal power of -6dBm; all other modems must continue to observe the -12dBm limitation.

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<sup>5</sup> While the primary responsibility for establishing that new terminal gear does not cause harm to the network rests with the manufacturer, network providers should also have the ability to test the gear. By allowing network providers to test terminal equipment on their own networks, any unique circumstances (*i.e.*, older technology cable, extremely long loop lengths, various interoffice trunking arrangements, etc.) can be objectively evaluated and reported for inclusion in the record.

<sup>6</sup> See, T1A1.7's Technical Report at 6.1. The designers of the V.90 modem indicate that when a V.90 transmission scheme cannot be established, the modems will drop back to the V.34 scheme and thus the Technical Report presumes that the V.90 modem will then comply with all current Part 68 requirements while in the V.34 mode.

**D. Not all users will be able to achieve 56Kbs rates even if the signal power limit is raised to -6dBm.**

Unfortunately even with an increase in signal power, only a limited number of Internet customers will likely experience higher transmission rates using V.90 modems. As the T1A1.7's Technical Report clearly indicates, the highest transmission scheme can only be established when the call path between the ISP and the customer has one digital to analog conversion. If an interoffice trunk between two central offices in the call path is analog, the maximum transmission rate cannot exceed V.34 limits. In addition many subscribers today are served on facilities that use digital line concentrators or loading coils – also limiting the transmission rates to V.34. Thus, the number of customers that may potentially benefit from the proposed rule change must be carefully examined before the Commission can properly balance the benefits of the proposed rule change against the network risks that may result.

**II. CONCLUSION**

GTE urges the Commission to not permit any terminal device to increase signal power beyond the current rules until a thorough examination has been conducted and it can be conclusively demonstrated that the increased signal power will not harm the current Public Switched Telephone Network.



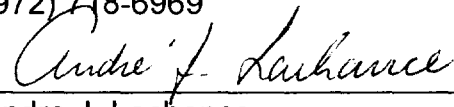
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